WHAT IS CLAIMED IS:

1. In a chirp radio communication system, a method of discriminating between plural types of transmitters transmitting chirp signals of different slopes within a same frequency range comprising the steps of:

(a) receiving a chirp signal;

(b) detecting the slope of the received chirp signal; and

(c) determining transmitter type as a function of the detected chirp slope.

2. The method of Claim 1 further comprising the step of asynchronously transmitting chirp signals in a geographic area.

3. The method of Claim 1 wherein transmitter type is determined as a function of the magnitude of the detected chirp slope.

4. The method of Claim 1 wherein transmitter type is determined as a function of the polarity of the detected chirp slope.

5. The method of Claim 1 wherein transmitter type is determined as a function of the magnitude and polarity of the detected chirp slope.

6. In a chirp radio communication system, a method of discriminating between two types of transmitters transmitting chirp signals of opposing slope within the same chirp frequency range comprising the steps of:

(a) receiving a chirp signal;

(b) detecting the slope of the received chirp signal; and

(c) determining transmitter type as a function of the detected chirp slope.

7. The method of Claim 6 further comprising the step of asynchronously transmitting chirp signals of opposing slopes.

8. In a chirp radio communication system for transmitting and receiving a first chirp signal of a first predetermined slope, the first predetermined slope continuously increasing in frequency over a predetermined frequency band during a predetermined amount of time, the improvement comprising transmitting and receiving a second chirp signal having a different slope from the first predetermined slope over the predetermined frequency band in the same geographic area, whereby the data capacity of the system is significantly increased without increasing the first predetermined frequency band.

9. The system of Claim 8 wherein the different slope is continuously decreasing in frequency over the predetermined frequency band during the predetermined amount of time.

10. The system of Claim 8 wherein the slope of the second chirp signal opposes the first predetermined slope.

11. The system of Claim 8 wherein the first chirp signal and the second chirp signal are being asynchronously transmitted.

12. A method of increasing the number of users that can be simultaneously accommodated in a chirp radio communication system comprising the steps of:

(a) transmitting and receiving a first chirp signal of a first predetermined slope over a predetermined frequency band; and

(b) transmitting and receiving a second chirp signal over the predetermined frequency band in the same geographic area, the second chirp signal having a different slope from the first predetermined slope.

13. The method of Claim 12 wherein the first chirp signal and the second chirp signal are being transmitted asynchronously.

14. The method of Claim 12 wherein the slope of the second chirp signal opposes the first predetermined slope.

15. The method of Claim 12 wherein the slope of the second chirp signal having the same polarity and different magnitude from the first predetermined slope.

16. The method of Claim 12 wherein the slope of the second chirp signal having a different polarity and different magnitude from the first predetermined slope.

17. A chirp radio communication system operable in a geographic area comprising a first type of receivers and transmitters for receiving and transmitting chirp signals of a first slope and a second type of receivers and transmitters for receiving and transmitting chirp signal of a second slope.

18. A chirp radio communication system operable in a geographic area comprising plural types of receivers and transmitters for receiving and transmitting chirp signals, each type of receiver and transmitter receiving and transmitting a chirp signal of a different slope.